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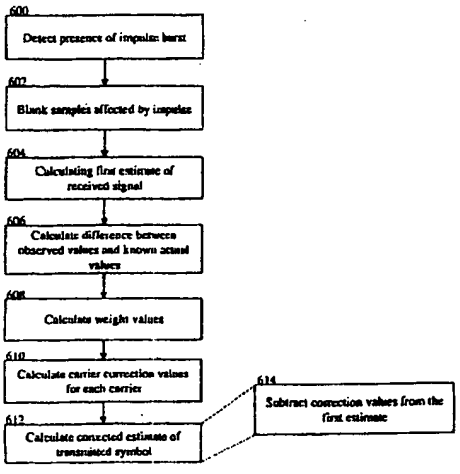
(54) Title: METHOD AND SYSTEM FOR RECEIVING A MULTI-CARRIER SIGNAL



(57) Abstract: Method and system for reducing impulsive burst noise in less delayed reception in pilot based OFDM systems, especially using DVB-T standard such as Digital Video Broadcasting (DVB) is provided. The method contains following steps: 1) recognition of the impulse position and possibly length in the time domain symbol, 2) blanking of those samples of the symbol where significant amount of impulse noise is present, 3) calculating the first estimate of the received signal from the blanked symbol, 4) deriving correction values for the carrier estimates by applying prior information (pilot carriers), and 5) the corrected estimate of the received symbol is derived by subtracting the correction values of step 4 from the first estimate of carriers derived in step 3. The method and arrangement allow correction of fairly long bursts of impulse noise with minor degradation only. The complexity of the scheme and the additional energy consumption are fairly low. The method provides considerably more effective more simple and less delay in broadcast data reception than previously known solutions in interfered multi-carrier signal reception.

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